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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/538,455 03/30/00 XU

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EXAMINER

CHAMBERS, A

ART UNIT

PAPER NUMBER

3753

DATE MAILED:

04/09/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**09/538,455**

Applicant(s)  
**Xu et al**

Examiner  
**A. Michael Chambers**

Group Art Unit  
**3753**



☒ Responsive to communication(s) filed on 2/12/01

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-27 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-27 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 3753

### DETAILED ACTION

1. This action is in response to an amendment filed February 21, 2001. Claim 1 has been amended. Claims 18-27 have been added. Claims 1-27 are pending.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

3. Claims 1-12, and 18-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Higdon et al. Note the disclosure of a "...stream switching system..." for a chromatograph including a plurality of solenoid valves 98, a sheet heater (column 4, lines 57+), and an insulated hosing (Figure 3B, for example). Contrary to applicants' remarks, the patent to Higdon et al clearly shows a common stream channel (single inlet/multiple outlet 72) valved by a particular solenoid 98. "At least part of the tubing being pre-heated..." by the "sheet heater" (column 4, lines 57+)(claims 1+). The solenoid actuated valves 98 clearly "vale" the "...input and output ports....between an open and closed position." (Claim 9).. The reduced 'tubing size' shown in Figure 3A (claim 18) acts as a restrictor. With regard to claims 19 and 20, note the plurality of input and output port (Figure 3A).

Art Unit: 3753

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 148 USPQ 459, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

Art Unit: 3753

4. Considering objective evidence present in the application indicating obviousness or unobviousness.

7. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higdon et al in view of Upchurch. Higdon et al disclose the claimed invention except for the recitation of a "filter" as taught by Upchurch (Figure 1 ). The plurality of check valves (ball valves) act as "pressure regulators. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the chromatograph system of Higdon et al to include a "cartridge filter" , as taught by Upchurch in order to provide more "pure" fluid to be tested and/or processed. . Further in particular note the disclosure of a filter for the "fluid streams" (column 6, lines 58+) of Higdon et al.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


9. Any inquiry concerning this communication communications from the Examiner should be directed to a. Michael Chambers whose telephone number is (703) 308-1016 (FAX (703) 308-7765).

Art Unit: 3753

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

amc  
April 7, 2001



**A. MICHAEL CHAMBERS  
PRIMARY EXAMINER  
ART UNIT 3753**